Engineering Section and Land Acquisition Unit

What eventually became the Engineering Section had its origin in the 1937 Land and Waters Division, consisting of a chief, E. A. Mayes, and one secretary. Mayes' services were shared with the State Park Board, since Parks was initially quartered with the Conservation Department and they shared a common fiscal officer.

Lands and Waters Division was part of the administrative staff assigned to the director; its job was primarily liaison and coordination with three Civilian Conservation Corps camps assigned to land owned by the Department. Forest and refuge development during the first two years of the Department's existence consisted of a thirty-two-acre lake at Indian Trail, ten ponds at Montauk Park, nursery improvements at Meramec Park, nine buildings, twenty-four miles of fences, seven miles of telephone lines, fifteen miles of road improvement, 413 acres of reforestation, 3,381 acres of timber stand improvement, three dams and firefighting. This was all CCC work.

During the next two years, 1939-1941, the title was changed to Engineering, Acquisition and Construction, and the staff had grown to six permanent employees: a chief engineer, research assistant, legal counsel, engineer, secretary and stenographer. The functions included general and detailed planning for development of Department-owned properties, although construction was by CCC, Work Projects Administration and National Youth Administration personnel, and acquisition of lands for Department projects.

Mayes left the Department for military service in 1942, and was replaced by William M. Hill, who served until the end of World War II.¹ The staff remained at six, but the legal counsel was replaced by an architect. Construction by the CCC, WPA and NYA was greatly reduced. During the war years the staff

was reduced to four, and emphasis was on planning for post-war projects, since shortages of manpower and materials cut development projects to the bone.

Following World War II the section, now renamed Development Section, was greatly expanded as several programs of considerable size were begun. These were the first public waterfowl shooting areas, at Fountain Grove and later Swan Lake, and the small lake construction program. Development Section was charged with the planning, designing and construction of these projects. J. Warren Smith became the chief engineer in 1945. For six months of 1945, the section was assigned to Forestry Division, but was thereafter assigned to the Fish and Game Division.

Smith was aggressive and between 1945 and 1948, the Development Section grew to thirty-six permanent employees who conducted the activities of engineering, acquisition, development, maintenance, replacement and construction for the entire Department. The lake building and public waterfowl area programs gained considerable momentum.

When Larry R. Gale became chief of Fish and Game Division in 1957, he had to coordinate Smith's aggressive building efforts, which were occasionally undertaken without consultation with other units of the Department. In 1958, Smith resigned and Floyd C. Larsen became the chief engineer, and engineering projects were brought into line with an overall planned system. As the Department acquired more public use areas, needed priorities were established as to location, planning and development.

The Forestry Division had acquired its own construction crews to handle projects for that division. Development Section was charged with major in-house construction and overseeing construction involving outside firms.

¹ Engineering Section chiefs have been Edwin A. Mayes (1937-1942), William M. Hill (1942-1945), J. Warren Smith (1945-1958), Floyd C. Larsen (1959-1963) and Charles E. Hooker since 1963.



in 1947 Department equipment rolled into action to construct the Fountain Grove public hunting area. From 1942 to 1948, the Development Section grew from six to thirty-six permanent employees.

When Director William Towell reorganized the Department in 1964, creating an Operations Section out of Forestry's construction and maintenance unit, all Department-staffed light construction and maintenance was assigned to the new section, while Engineering retained the design, heavy construction and acquisition functions. Heavy equipment was shifted to Operations, along with some personnel, in 1982.

Larsen retired in 1963, and Charles E. Hooker became chief of the Engineering Section, which was taken from Fish and Game Division and became a staff unit in 1964.2 Then in 1977, following passage of the conservation sales tax, accelerated land acquisition began under the *Design for Conservation* and a separate Land Acquisition Unit was formed. Engineering concentrated entirely on design and construction.

With the addition of several engineers, an architect, draftsmen, soil technicians, computer capabilities and the latest electronic equipment for survey crews, the forty-five member section has been able to meet the increased demands under *Design* programs. The programs are much the same as in years past, only there are many more of them.

With increasing loss of habitat, the Department's programs are in part directed at buying land to preserve existing habitat, and construction and development to enhance habitat. Using conservation engineering principles, the section is trying to create high quality habitat to replace the lost quantity of habitat, and also provide the public with recreational and educational facilities.

Because of Bode's and Arthur Clark's initial opposition to the Department owning land, early acquisition was more by default

² Hooker became possibly the nation's first conservation engineer to receive the coveted American Motors Conservation Award in 1972, based in part on sound conservation engineering in developing plans for the Ted Shanks Wildlife Area.



Floyd C. Larsen was the Department's conservation engineer from 1946 through 1963, serving as chief engineer between 1959 and 1963.

than otherwise. Commissioner A. P. Greensfelder made it one of his objectives to get what is now Rockwoods Reservation into Department ownership. This was one of the first major acreages acquired in 1938, despite the objections of Bode or Clark. Rockwoods Range was purchased in 1943.

When the E. I. DuPont de Nemours Company offered lands along the Mississippi River to the Department, also in 1938, they were gladly accepted by the Commission and assigned to the Forestry Division. Two years later Caney Mountain Refuge was purchased to aid in deer and turkey restoration.

State Forester George O. White, who had been involved in acquisition for the U. S. Forest Service, had a different view of land ownership. He felt the Department should own land as state forests, which would be demonstration areas of good forest management. The Department had inherited about 34,000 acres of land from the old Fish and Game Department that had been acquired but never

developed as state parks. White named these state forests and little by little, a parcel here and a parcel there, all at rock bottom prices, he acquired additional acreage for forestry purposes.

In late 1944, Melvin O. Steen replaced Clark as Fish and Game Division chief, and he strongly believed in acquiring lands for hunting and fishing purposes. Meanwhile, Bode somewhat shifted his own position on acquiring lands. When, in 1947, there came an offer of cash from Mrs. August A. Busch for purchase of the Busch Memorial Wildlife Area, Steen urged its acceptance. It was under Steen that Fountain Grove (1947) -and Duck Creek (1951) waterfowl areas were acquired, and the lake building programs adopted. He acquired Peck Ranch Wildlife Area in 1945, which became the focus of turkey restoration efforts.

Through the years, land acquisition was handled by Engineering Section for the divisions, with the assistance of the Department's



Charles E. Hooker replaced Floyd Larsen as chief engineer in 1963. He won the coveted American Motors Conservation Award in 1972 for exceptional service to conservation.

legal counsel. James D. Beets was transferred from his Field Service agent position to the job of land acquisition agent in 1952.3 When the stream access program was begun in the late 1950s Carl **Noren** was assigned to seek out and acquire desirable accesses. About 1967, Clarence Salty Daniel was assigned the task of working with citizens wishing to donate lands or funds to the Department, but major land acquisition remained in **En**gineering Section until after passage of the conservation sales tax in 1976.

A separate Land Acquisition Unit was established in anticipation of more active land purchasing under the *Design for Conservation* program, and Ronald E. Thoma was named to head it.

A major goal of *Design* was the purchase of 300,000 acres of land for many purposes. Currently, the Department has accomplished

Realty Agent Pam Boatright checks deed descriptions for land purchased by the Department. She joined the Department in 1986.



Edgar B. Biffle headed the Land Acquisition effort from 1956 to 1973. He was a biologist by training and supervised a 1948 cover restoration program.



3 He was followed by Edgar B. Biffle in 1956, and Ronald E. Thoma in 1973.



In 1967, Clarence Salty Daniel was assigned to work with citizens interested in donating lands or funds to the Department.

about two-thirds of that goal, though emphasis is gradually shifting from acquisition to development, to assure optimum enjoyment by all interests. Fourteen new upland areas and additions to existing areas have been purchased, totaling 33,800 acres. There have been eighteen special feature areas, ten natural areas and eight urban wild acres areas bought, totaling 5,360 acres. The Department has acquired 1,800 acres of native prairie in ten separate tracts, and acquired nearly 150 areas which provide habitat protection and access to 170 miles of seventy different Missouri streams. Seven areas acquired have existing lakes with 453 acres of water, and eight new lake sites have been purchased. Lakes have been built on six of these sites, adding 519 more acres of water.

During the campaign for passage of Amendment 4 the Commission pledged that it would not resort to its powers of eminent domain and condemnation. These powers had been used sparingly in the past, usually only in friendly court cases to settle estates. Refusing to exercise eminent domain sometimes forces the Department to drop projects if it cannot secure necessary lands in negotiation, but the policy favors the good neighbor image.

All lands bought are from willing sellers, and purchases are made following appraisals by disinterested, outside parties. It is a tribute to the Commission's good reputation that lands often are offered for sale below appraised values, and many as part of a donation package from citizens interested in furthering the cause of conservation or wishing to memorialize a friend or relative.

The Land Acquisition Unit, which presently consists of four persons, receives much help in its activities from personnel of other divisions and the Department's legal counsel.



Ron E. Thoma was named head of the new Land Acquisition Unit, established in 1976 in anticipation of increased funds from the conservation sales tax.